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EXAMINER	
FOWLKES, ANDRE R	
ART UNIT	**PAPER NUMBER**
2192	

DATE MAILED: 04/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/996,560	GIBBONS, MARK PHILIP	
	Examiner	Art Unit	
	Andre R. Fowlkes	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 November 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the amendment filed 11/17/04.

Drawings

2. The objection to the drawings is withdrawn, in view of applicant's amendment.

Specification

3. The objection to the specification is withdrawn, in view of applicant's amendment

Claim Rejections - 35 USC § 112

4. The rejection of claims 3, 4 and 9-11 under 35 U.S.C. 112, second paragraph, is withdrawn, in view of applicant's amendment.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 10 recites the limitation "said one computer" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

7. The rejection of claims 9-11 under 35 U.S.C. 101 is withdrawn, in view of applicant's amendment.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Thomas et al., (Thomas), U.S. Patent Publication No. 2002/0143641.

As per claim 1, Thomas discloses **a method for allowing objects in a first programming language to communicate with objects in a second programming language** (p. 1 col. R:41-44, "the client (using a first programming language) downloads the requested communication proxy and dynamically interacts, at runtime, with an Internet service (using a second programming language) using the requested communication proxy, the communication proxy being local to the client"), **comprising:**

- receiving metadata information from a server running said second programming language on a client running said first programming language (p. 1 col. R:32, "(a server) transmits metadata to the client"),

- generating proxies for said first programming language from said metadata information, using a development tool for said first programming language, wherein said proxies are generated by a one-to-one mapping of classes from said second programming language to said first programming language (p. 1 col. R:32-35, "transmits metadata to the client enabling the client to locate the ... proxy. (Proxies are available for) Java (and) common language runtime (i.e. a first and second programming language technologies)", and the proxies must be generated at some point in time),

- implementing said proxies on said client, wherein said method is provided solely in said first programming language and said client does not require any components from said second programming language (p. 1 col. R:41-44, "the client downloads the requested communication proxy and dynamically interacts, at runtime, with an Internet service using the requested communication proxy, the communication proxy being local to the client").

As per claim 2, the rejection of claim 1 is incorporated and further, Thomas discloses **using said proxies to enable bi-directional communication between said client and said server** (Fig. 1, and associated text, (e.g. p. 1 col. R:54-61)).

As per claim 3, the rejection of claim 1 is incorporated and further, Thomas discloses that **said first programming language is a JAVA cross platform programming language and said second programming language is common**

language runtime (CLR) (p. 1 col. R:33-35, "transmits metadata to the client enabling the client to locate the ... proxy. (Proxies are available for) Java (and) common language runtime (i.e. a first and second programming language technologies)").

As per claim 5, the rejection of claim 1 is incorporated and further, Thomas discloses that **said client and said server communicate using SOAP formatted messages** (p. 1 col. R:36-39, "The application-level communication protocols include ... SOAP").

As per claim 6, the rejection of claim 1 is incorporated and further, Thomas discloses that **said client and said server communicate using binary formatted messages** (p. 2 col. L:4-6, "the metadata data (communicated) can be ... binary (formatted messages)").

As per claim 7, the rejection of claim 1 is incorporated and further, Thomas discloses **passing said proxies to a runtime tool using said first programming language** (p. 1 col. L:8-12, "this invention relates to ... dynamically interacting , at runtime, with an Internet service using ... (a) proxy", and figure 1, and associated text, (e.g. p. 1 col. R:54-61), shows a proxy being passed at runtime).

As per claim 8, the rejection of claim 7 is incorporated and further, Thomas discloses that **said runtime tool is capable of operating independently of said**

development tool (figure 1, and associated text, (e.g. p. 1 col. R:54-61) shows the runtime operation, independently of the development operation).

As per claim 9, Thomas discloses **a system enabling bi-directional communication using .Net Remoting protocol between JAVA objects in a JAVA virtual machine environment and .Net assemblies objects in a common language runtime (CLR) environment** (p. 1 col. R:41-44, "the client (using a first programming language) downloads the requested communication proxy and dynamically interacts, at runtime, with an Internet service (using a second programming language) using the requested communication proxy, the communication proxy being local to the client"), **comprising:**

- a computer network (p. 1 col. R:16, "Internet"),

- a JVM computer having random access memory (RAM) and at least one of hard disk storage memory (HDS) and solid state storage memory (SSSM), said computer having a JAVA virtual machine (JVM) environment and JAVA objects in one of said HDS and SSSM, said JVM computer coupled to said computer network (p. 1 col. R:32-35, " (Proxies are available for) Java),

- a CLR computer having random access memory (RAM) and at least one of hard disk storage memory (HDS) and solid state storage memory (SSSM), said computer having a CLR environment and .Net assemblies in one of said HDS and SSSM, said CLR computer coupled to said network (p. 1 col. R:32-35, "(Proxies are available for) Java (and) common language runtime (CLR),

- a JAVA development computer with RAM, and one of HDS and SSSM, said JAVA development computer having a JVM environment and a JAVA-based tool in one of said HAD or SSSM, said JAVA development computer coupled to said network, wherein said JAVA-based tool is used, during development, to select .Net assemblies running on CLR computers, (p. 1 col. R:32-35, "transmits metadata to the client enabling the client to locate (i.e. select) the ... proxy. (Proxies are available for) Java (and) common language runtime (i.e. a first and second programming language technologies)", and the proxies must be generated at some point in time), **wherein:**

- said JAVA-based tool being used during development to select .Net assemblies running on said CLR computer on said computer network and to generate a corresponding set of JAVA proxies (p. 1 col. R:32-35, "transmits metadata to the client enabling the client to locate the ... proxy. (Proxies are available for) Java (and) common language runtime (i.e. a first and second programming language technologies)", and the proxies must be generated at some point in time),

- said JAVA proxies are copied onto said VM computer and are operative to allow said JAVA objects to communicate with selected .Net assemblies on said CLR computer (p. 1 col. R:32-35, "transmits metadata to the client enabling the client to locate the ... proxy. (Proxies are available for) Java (and) common language runtime (i.e. a first and second programming language technologies)"),

- a CLR development computer having memory comprising RAM, and one of HDS and SSSS, and having a CLR environment in said memory, said CLR development computer coupled to said computer network, (p. 1 col. R:32-35, "transmits metadata to the client enabling the client to locate the ... proxy. (Proxies are available for) Java (and) common language runtime), **and having:**

- a CLR-based tool in said memory operative during development to select specified JAVA objects on said JVM computer over said computer network and to generate a corresponding set of CLR proxies wherein said CLR proxies are copied onto said CLR computer and are operative to allow said CLR objects to communicate with said specified JAVA objects on said JVM computer (p. 1 col. R:32-35, "transmits metadata to the client enabling the client to locate the ... proxy. (Proxies are available for) Java (and) common language runtime (i.e. a first and second programming language technologies)", and the proxies must be generated at some point in time).

As per claim 10, the rejection of claim 9 is incorporated and further, Thomas discloses **a JAVA cross platform programming language-based runtime tool stored on** a **computer for handling said JAVA proxies and said .Net proxies** (p. 1 col. R:33-35, "(Proxies are run for communicating between) Java (and) common language runtime (i.e. a first and second programming language technologies)").

As per claim 11, the rejection of claim 10 is incorporated and further, Thomas discloses that **a JAVA cross platform programming language-based runtime tool is capable of operating independently of said a JAVA cross platform programming language-based tools for generating JAVA and .Net proxies** (figure 1, and associated text, (e.g. p. 1 col. R:54-61) shows the runtime operation, independently of the development operation and p. 1 col. R:33-35, "(Proxies are run for) Java (and) common language runtime (i.e. a first and second programming language technologies)").

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas et al., (Thomas), U.S. Patent Publication No. 2002/0143641 in view of Zhang, U.S. Patent Publication No. 2003/0101235.

As per claim 4, the rejection of claim 1 is incorporated and further, Thomas discloses that **said second programming language is a JAVA cross platform programming language** (p. 1 col. R:33-35, "transmits metadata to the client enabling

the client to locate the ... proxy. (Proxies are available for) Java (and) common language runtime (i.e. a first and second programming language technologies)").

Thomas doesn't explicitly disclose that **said first programming language is .Net Remoting.** However, Zhang, in an analogous environment, discloses that **said first programming language is .Net Remoting** (p. 7 col. R:17-20, "(the) messages can sit on a number of communication ... (protocols, including) Microsoft .NET Remoting").

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to incorporate the teachings of Zhang into the system of Thomas to use .NET Remoting. The modification would have been obvious because one of ordinary skill in the art because one would want the flexibility and convenience of using .Net remoting to communicate across any protocol.

Response to Arguments

12. Applicants arguments have been considered but they are not persuasive.

In the remarks, the applicant has argued substantially that:

1) The cited art does not disclose a client generating its own communication proxy from metadata information received from a server running a second programming language, at p. 3:23-4:12.

Examiner's response:

1) The cited art discloses locating the required proxy. Creation of a proxy is well known and documented in the art and does not distinguish the instant application over the prior art.

In the remarks, the applicant has argued substantially that:

2) Applicant's invention generates the proxy and is able to optimize the proxy for the particular purpose for which it will be used (e.g. to provide a more efficient way of establishing communication between Java and .Net objects, at p. 3:23-4:12.

Examiner's response:

2) The applicant is arguing for limitations that are disclosed but not claimed. Specifically, the claims do not describe optimizing the proxies.

In the remarks, the applicant has argued substantially that:

3) Thomas simply takes an existing proxy for the internet service which would not ordinarily be optimized for a particular client purpose, at p. 3:23-4:12.

Examiner's response:

3) The applicant is arguing for limitations that are disclosed but not claimed. Specifically, the claims do not describe optimizing the proxies.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre R. Fowlkes whose telephone number is (571) 272-3697. The examiner can normally be reached on Monday - Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571)272-3695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application should be directed to the **TC 2100 Group receptionist: 571-272-2100.**

ARF

TUAN DAM
SUPERVISORY PATENT EXAMINER